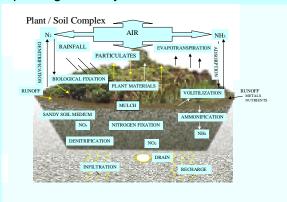
# Low Impact Development Pilot Project Practices

## **Naval District Washington**



#### **Bioretention**

Bioretention is the use of landscaped areas that use a specialized mix of soils and plants to filter pollutants, reduce runoff volume, and control the timing of runoff. This filtering technique can be designed in many configurations. For example some parking areas will be retrofit with long narrow bioretention strips between the parking stalls, bioretention planters may be installed near buildings, or landscaped islands in parking lots may be retrofit.



## **Permeable Pavers**

Permeable Pavers are individual paving blocks with gravel filled gaps between the bricks that let stormwater infiltrate into a stone filled water storage area

NITROGEN CYCLE FOR BIORETENTION



below the pavement. This technique is useful for changing the timing, or peak runoff rates of stormwater.

### **Rainbarrels and Disconnectivity**

One of the most important strategies used to reduce peak stormwater runoff rates is to disconnect directly impervious areas. This includes disconnecting downspouts from buildings from the storm drain system and directing runoff to grass or landscaped areas. Roof runoff can also be stored in rainbarrels that will slowly release the runoff or let it be used for watering of landscaped areas.



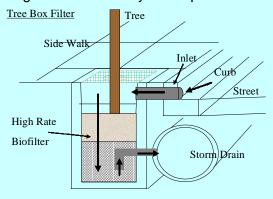


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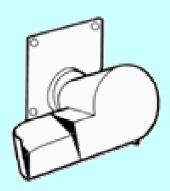
### **Street Tree Filters**

Street tree filters use the plant / soil complex to filter pollutants and the water from the runoff to help trees survive during times of drought. The larger and more porous soil areas also help the long-term survivability of the plants.



## **Storm Drain Inlet Retrofits**

Inlets are being retrofit with devices that either help remove oils, grease, and debris, or change the peak runoff rates of stormwater.



## **Soil Amendments**

The addition of organic material, such as mulch, compost, and topsoil along with the aeration of the soils will help restore the water retaining capacity of the soil. This helps to reduce the volume and peak runoff rates of stormwater, filtering of pollutants, and conservation of water for landscaping.



## LID Photographic Credits:

Permeable Pavements: Unilock

Soils: Texas Department of

Transportation

Bioretention Schematic: Prince George's

County, Maryland Department of

Environmental Resources Inlet Retrofit: Hil-Tech